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**EXTENSION SERVICE**  
**REVIEW**

U.S. DEPARTMENT OF AGRICULTURE \* SEPTEMBER 1969



4-H: Opportunity for all  
See page 2

*The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.*

*The Review offers the Extension worker, in his role of educational leader, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods, tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.*

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## EXTENSION SERVICE

# REVIEW

*Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.*

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### 4-H: Opportunity for All

The title above is the theme of the 1969 National 4-H Week observance. Opportunity in 4-H has never been greater. The last few years have been particularly fruitful in adding new dimensions to 4-H activities and projects. These new dimensions are helping the 4-H concept and philosophy keep pace with the changing social and economic environment our youth know.

One change is the additional flexibility in 4-H. It permits tailoring projects to suit the individual's needs, resources, and interests. This flexibility makes 4-H more attractive to 9- to 19-year-olds. Projects which have less rigid timetables and are judged on a wide range of accomplishments allow members to develop a greater measure of self-discipline.

A second innovation is the added emphasis on the "why." This element broadens the member's perspective and makes the "how" more meaningful. The "why" helps youth understand the world they live in. It also helps them keep pace with the social and scientific innovations they soon must relate to and make decisions about.

The third innovation is that of going beyond the formal "club structure" to include such things as informal groups and self-determined individual projects. Another good example is the short-term projects or activities designed to provide group activity while teaching a skill related to better living. These meet a very special need for a very special audience—that group of youth who previously have experienced only limited social contacts and group action.

These innovations indeed have a powerfully positive influence on the opportunities of 4-H. They deserve to be made especially visible in your forthcoming observance of National 4-H Week.—WJW





## Outdoor conservation classroom



*This burl, above left, is one of the many educational features of the forest. At right, James Halm (left), 4-H agent, and Michael Moore, area forester for the Department of Natural Resources, examine wildflowers growing near the nature trail.*

by  
Dean C. Bork  
Extension 4-H Editor  
Michigan State University

A 135-acre conservation classroom near Saginaw, Michigan, is fast becoming a reality, thanks to an Extension 4-H agent and an area forester. They have enlisted the help of many interested agencies and individuals to provide this educational feature for local youth groups, as well as the general public.

The site of the developing outdoor conservation classroom is Price Forest, located 3½ miles south of the Saginaw city limits.

The land was deeded to the Forestry Department of Michigan State University in 1940 by James and Emily Price.

In a 1940 letter to MSU's president, James Price said that the purpose of deeding the land to the State was "to assure its continued use to the public for public purposes."

Until now, the forest has been used only for research studies by the MSU Forestry Department. But Jim Halm, Saginaw County Extension 4-H and youth agent, and Mike Moore, area forester with the Michigan Department of Natural Resources, thought the forest could be developed to provide more public use, especially to youth groups.

Moore and Halm plan a 1-mile self-guided nature trail through the forest. There will be 18 nature stops, and Moore is developing a pamphlet to explain the natural history of the forest and each stop of the nature trail.

Wood chips are being used on parts of the trail to prevent muddy spots from developing in low-lying areas.

In addition to the nature trail, Moore and Halm hope that a well, toilets, and a fire circle will soon be built.

Day camping is the immediate goal of Moore and Halm, but they believe that overnight camping may be possible in the future if facilities are developed.

Moore and Halm foresee the outdoor conservation classroom as being used by schools, 4-H groups, Girl Scouts, Campfire Girls, Boy Scouts, the Saginaw inter-city recreation department, and the general public.

Trees in the forest include balsam fir, Douglas fir, white spruce, white pine, cedar, ironwood, birch, red oak, beech, red and sugar maple, sassafras, black cherry, and hickory.

"Aspen are taking over an area that was once farmland," points out Moore. "This is the first step in a climax forest."

"There are at least 35 species of birds in the forest, including rushes, flickers, cardinals and martins."

Moore also plans to scatter wildflower seeds along the nature trail.

"The great thing about this project is the cooperation between so many individuals and agencies," he adds.

In addition to Halm and Moore, the steering committee for planning and developing the forest consists of representatives from the Saginaw County Soil Conservation Service, the Saginaw Field and Stream Club, Girl Scouts, area schools, the Saginaw city recreation department, Campfire Girls, and the Bridgeport Road Commission.

"With the rapidly growing urban and suburban population of this area, there is a real need for a facility of this type," says Halm.

If everyone involved in developing the outdoor conservation classroom is as enthusiastic as Halm and Moore, today's and tomorrow's youth of this area should benefit greatly. □

by  
Kenneth Copeland  
*Extension magazine editor*  
*Auburn University*

## Alabama's limited-resource farmers benefit from

# Whole-farm demonstrations

Take what you have and make the most of it through wise planning. That's the goal behind the Whole-Farm Demonstrations on 135 limited-resource Alabama farms last year.

In setting up Whole-Farm Demonstrations, the county Extension chairman or farm agent helps the farmer determine his available resources. Then the agent, with the assistance of Extension farm management specialists from Auburn University, helps the farmer plan his entire operation to get maximum returns from each resource.

Demonstrational farms are used for tours, farmer meetings, and mass media releases to inform others of opportunities that exist.

Charles Maddox, Extension farm management specialist, states that problems on limited-resource farms are numerous. Solutions are complex and long-run. Most studies show that inadequate training in the principles of management and decisionmaking is possibly the major contributing factor.

Limited-resource farms are usually characterized by small cropland acreage, limited capital, low production, and inefficient use of family labor. They are often operated by a poorly educated person who is nearing retirement.

In Marengo County, where 30 to 35 percent of the farms are within the limited-resource group, here's how improvements have been made on two farms.

John B. Richardson of the Gallion community will soon move into a new house. Willie Hackworth of the

Shiloh community is farming with a tractor for the first time this year.

Richardson's 1968 net farm income was \$5,770 as compared to \$802 in 1966. His cash expense rose only a little over \$1,000 in that time. His cows are now averaging 6,000 pounds of milk each, compared with 4,000 pounds in 1966.

At the beginning of 1967, Farm Agent C. S. Foreman, who is responsible for the limited-resource work in Marengo County, analyzed Richardson's operation. He immediately helped Richardson set up a program of culling low producing cows and replacing them with higher producers, growing more and better grain and forage, and making wiser use of his labor.

By soil testing, which he had never done before, and applying the proper amount of the correct plant nutrients, Richardson increased per acre corn yields the first year on 15 acres from 30 to 70 bushels per acre.

Soil test recommendations called for a ton of lime per acre plus a complete fertilizer—50 pounds of actual ingredients of nitrogen, phosphorus, and potassium. In the past Richardson had used only superphosphate.

Passers-by, seeing that Richardson's is often the only farm with green grazing, sometimes stop and ask how he does it. They wonder how he can afford to buy fertilizer.

At a recent meeting at one of Auburn University's substations, Richardson said, "I want to tell you something. Money spent on fertilizer pays

me the greatest return of anything I do. It works for me day and night and even on Sunday."

By clipping his pastures, he has found that he can control most grasses and weeds. Fertilizing and managing his pastures add up to more quality grazing and more milk. End product—more money in his pocket.

To improve the quality of his cows, he now uses better bulls.

Having too many jobs to do during various weeks of the year once presented Richardson a problem—but not any more. Foreman helped him make a work calendar listing jobs to be done each month. "This helps prevent a pileup of jobs," Foreman said.

An average of two tours a year has been held on Richardson's farm. A group of dairymen from another county visited his milk processing plant.

Other farmers in the communities are already latching onto new practices after seeing how well they work on these demonstrational farms, reports Farm Agent Foreman. Many farmers in the community are soil testing, applying a complete fertilizer, and moving pastures for the first time. Dairymen with less than 10 cows have seen that six or eight good cows are more profitable than 12 or 14 low producers.

Richardson, who has owned his 161-acre farm for many years, has even changed his idea about credit. "Borrowed money," he said, "can work for you just like fertilizer. But when you borrow money, you must



*Extension Farm Agent Charles Foreman, at left below, looks at John Richardson's record book to check the year's income. Willie Hackworth, in picture at right, discusses his first tractor with Farm Agent Foreman.*



have a good use for it. You can't frolic it away."

"We're going a little further in planning with Richardson," Miller said. "We know that this 62-year-old man isn't going to be able to dairy for many more years. So, when he gets his new house finished and paid for, he may need to change to an enterprise which doesn't require as much labor. In his setup of grazing and cows, he can convert to a beef operation by buying a beef-type bull."

"Foreman has helped me keep records," Richardson said. "That way I know which enterprise is paying me a return. I am older than Foreman, but he has certainly been a daddy to me when it comes to giving me advice."

Of all the improvements, Mrs. Richardson is proudest of the new house they will soon be moving into. "We've been planning this house all of our lives," she said. Richardson, through Foreman, got the house plan from the Auburn University Extension plan service.



"Live and make a living at home," is Willie Hackworth's philosophy in life. The most diversified farmer in Marengo County, Hackworth grows 5 acres of cotton, 1 acre of general garden, 1 acre of cucumbers, 3 acres of peas, 2 acres of butter beans, 8 acres of corn and has one sow and five brood cows.

Budgeting of his time was Hackworth's main problem. Miller and Foreman helped him solve this problem. By simply budgeting his time, he increased his income by one-third—from \$1,946 in 1967 to \$2,583 in

1968 with only an \$83 increase in expenses.

Last year, for example, Hackworth lost his cucumber crop because he had too many perishable crops to harvest at one time. But by working out a time calendar for planting the different varieties of cucumbers, he solved this problem. The calendar enabled Hackworth to fully use all of his summer labor—one 16-year-old child of his own plus four grandchildren.

Weeds and grasses presented Hackworth with an expensive problem last year. Miller and Foreman knew that it wasn't practical for him to buy expensive equipment for his small acreage. "What about a 3-gallon backpack sprayer?" he asked.

He walked off 100 feet and then sprayed this area with water. After determining how much water he applied, Miller and Foreman figured out how much preemergence chemical for him to mix with 3 gallons of water.

"I walked and sprayed my cotton land in about half a day," he said. "I figure that saved me at least 10 days or more of hand labor in cleaning out cotton. Cost of chemicals used was about \$16, but that investment saved me at least \$75."

"Somebody is touring his farm every week," said Foreman. "He's a leader and everybody is always trying to keep up with what he is doing."

All of his vegetables, with the exception of cucumbers, are sold to people coming to his farm to buy them. □

# Extension, county government respond to community opinion

If you want to know what people think about public affairs issues, ask them!

The Deschutes County Court (Oregon) determined public opinion last year through a 100-question survey entitled, "Your Opinions of Deschutes County." Over 8,000 of the 11,000 questionnaires were completed and collected—a response of nearly 73 percent.

The results gave county officials a better idea of the people's attitudes toward land use planning. Extension found out how its programs were regarded by the county citizens and immediately began making adjustments to serve them better.

Deschutes County's sunny, healthful, and invigorating climate is favorable to many crops and inviting to tourists and sportsmen. It also attracts summer-home owners and land speculators—good and bad—who are putting a strain on the county's resources.

Many people realize that something must be done, but resent regulations. The elected officials and many agency people realize the need for services and regulation. The survey was a means of communication between the two groups.

County voters had repealed county zoning and subdivision and building code ordinances by a narrow margin in 1966. This left the county government with no land use regulation during a period of rapid expansion. The rural population increased about 40 percent between 1960 and 1968.

Previous Extension-sponsored community meetings on the need for

long-range land use planning were poorly attended and were disrupted by representatives of a minority group opposed to zoning. Later, the Extension resource development staff presented to the County Court surveys of public opinion Extension had developed for several small western Oregon towns.

The court decided to develop a countywide public opinion survey on public affairs issues as a means of finding public attitudes and identifying needs. In addition, the survey involved hundreds of people in distributing the forms and in collecting and tabulating the results. It also provided a public forum for a divided county.

With help from Extension resource development specialists, a committee of 30 persons representing various interests in the county developed the survey questions. It was printed at Oregon State University at county expense.

A member of the County Court supervised the distribution of the 11,000 questionnaires and the collection of the 8,500 that were completed. She solicited assistance from community groups.

The collected reports were tabulated by high school students. The machine processing class of Central Oregon Community College determined the percentages and made the printout.

A firm of planning consultants, retained earlier to develop a county comprehensive plan, analyzed the survey. The analysis was distributed



*The results of the public opinion survey, being analyzed here by two members of the Deschutes County government, are helping both Extension and the county government to better meet the needs of the people.*

to a limited group of county officials and community leaders and was printed in several issues of a local weekly newspaper.

The 100 survey questions were divided into five topics: recreation, water, planning and development, county government services, and education and employment. The first 47 questions were answered by rating existing services as "good," "average," "inadequate," or "no opinion." Most of the remaining questions were an-



by  
Robert Sterling  
*County Extension Agent*  
*Deschutes County, Oregon*  
and  
Ted Sidor  
*CRD Program Leader*  
*Oregon State University*

swered "yes," "no," or "no opinion."  
There were a few fill-in questions.

The high rate of return indicated broad interest of county residents in the affairs of local government. In response to questions relating to planning and development, 61 percent favored countywide planning, yet 49 percent were opposed to land use regulation by zoning. The planning firm analyzing the survey results concluded that the people tended to confuse the two concepts. Many citizens did not understand the means of achieving control over what is generally considered undesirable development. The need for information programs on land use planning was indicated by 71 per cent of the respondents.

Thirteen questions in the survey concerned adequacy of various aspects of education in the county, including four on Cooperative Extension Service programs. The firm analyzing the survey reported that "specific note should be taken of the generally high ratings of adequacy (above 68 percent) given to the four Cooperative Extension programs of Oregon State University."

Several communities, however, where recreation subdivision development has been expanding rapidly, predictably indicated a large percentage with "no opinion" of Extension programs. And county Extension staff members were not satisfied with the relatively small number (19 percent) rating Extension programs as "good." They were concerned with ratings of "inadequate" of over 40 percent in two rural communities.

Examination of the population of the areas in which Extension received the greatest percentage of "inadequate" ratings shows that with one exception, a high proportion of the heads of families work off the farm or are retired. They have few contacts with Extension.

One community has some commercial agriculture. Most farms in the area change ownership frequently. Many are under-financed and marginal. Coarse soils and a short growing season have an adverse effect. As with all farm land in the county, pressure of rising land values brought about by development of recreational homesites and purchases for speculative purposes is being felt.

Following the survey, Extension began meeting with representative groups in the rural communities which gave a high "inadequate" response to Extension programs, in an effort to better meet their needs.

They decided to strengthen existing youth and family life programs in these communities. They also met with committees of representative residents to determine needs for agricultural programs. As a result three meetings have been held for farmers to discuss farm organizations and adaptability of new crops. Experiment Station staff and Extension agents served as discussion leaders. About half of the farmers attended.

A four-meeting shortcourse for part-time farmers was held after mailing a letter to over 700 such farmers asking for their suggestions for educational programs.

About 60 responded, indicating a preference for instruction on pastures and other forage crops, sprinkler irrigation, raising feeder cattle, garden production, and rural domestic water development. This subject matter was covered by Extension specialists, Experiment Station staff, and Extension agents.

Evaluation of these meetings by those attending indicated that they received valuable assistance.

The Extension staff talked with some residents of the areas where dissatisfaction with Extension programs was expressed, and also with Extension leaders in those areas. They found that many farmers would like more personal service from county agents than it is presently possible to give. Some people expressed resentment at Extension's role in controversial public affairs issues. The survey indicated a need for further study of attitudes toward Extension, particularly among the non-farm rural population.

Citizen attitudes on planning and development, revealed by the survey, have influenced governmental officials' decisions concerning land use regulation. Development of a comprehensive plan was started. A citizens' advisory group was formed to work with a new planning commission. They began studies of the county to develop land use and subdivision regulations which would meet local needs and be acceptable to the majority of citizens.

The county had two planning programs. The first was a "Congress for Community Progress" carried out by a chamber of commerce and a private utility firm. The second, the "Deschutes County Long Range Planning Conference for 1968," was conducted by Cooperative Extension in cooperation with about 200 committee members. These programs brought attention to public affairs issues and probably increased participation in the survey.

In final analysis, the survey served two purposes. It provided a means of communication between the elected official and the citizens, and it gave the people an opportunity to help develop a policy for their local government.

Because of the success of the program, two other Oregon counties are developing similar programs, and other counties are considering the idea. □

# Eastern shore health council gets action



*Above, Mrs. Doris Smith (standing at right) helps with a training session for Health Aides, who are a liaison between migrant workers and the agencies which serve them. At right, the public health director speaks at the meeting called to discuss the formation of the health council.*



by

Mrs. Doris Smith

*Extension home economist  
Accomack County, Virginia  
and*

Mrs. Ann W. Frame

*Home Economics Program Leader  
Virginia Extension Service*

Virginia's Eastern Shore peninsula—Accomack and Northampton Counties—is a land of history and a popular recreation spot. The lush farm land lying between the Atlantic Ocean and the Chesapeake Bay is a large vegetable production area for the northern market. But until a few years ago, the area lacked adequate health services.

This garden spot of 178,000 acres had some unusual health problems, partly because of the large number of migrant workers who come each year to harvest the crops. Also, before the Chesapeake Bay bridge-tunnel was built, the Eastern Shore was somewhat isolated and was reached from the rest of Virginia by ferry.

The migrant workers were known to have a high incidence of tuberculosis and venereal disease. Communicable disease facilities were limited. Treatment in some areas was not locally available, and migrant workers lacked hospital insurance. Each year the county had to pay for the cost of the treatment of many of the migrant workers.

Housing and sanitation of migrant workers was inadequate. It was difficult to follow them and their many children as they moved about.



Mrs. Doris Smith and Miss Emma Bratten, the two Extension home economists on the Eastern Shore, knew about both sides of this land of pleasant living. They had recognized some of the area's health problems, but it took a health workshop at Virginia Polytechnic Institute to show them what to do about them.

The workshop was sponsored by the Virginia Federation of Home Demonstration Clubs at their annual meeting. Health had been a long-time goal of these Extension cooperators. Their emphasis was on helping members get knowledge about existing health facilities in the State and community, use them, and help improve them.

One of the suggestions at the workshop was the creation of a Community Health Council. The agents decided on the way home that such a council was needed for the Eastern Shore.

They consulted with leaders of organizations and agencies and arranged for the local Public Health Director to call a public meeting. Doctors, nurses, and nutritionists attended, as did the health chairman from each home demonstration club and other interested people. They studied the advisability of forming a health council and took information back to their clubs and agencies for further discussion.

At the second public meeting, the Eastern Shore Health Council was organized. It was composed of 30 representatives from civic groups, voluntary agencies, government agencies, churches, and schools. Also included were the health chairman of

each home demonstration club in the two counties, and individual citizens interested in the health problems that confronted the area.

Over a period of years the council was divided into working committees to investigate problems and resources. Programs included films; lectures; discussions; and reports by leaders, doctors, and others. The Council held public meetings four to six times a year. Officials from the State Health Department in Richmond said that the Eastern Shore of Virginia was, beyond a doubt, the most health conscious community in the State.

One of the first accomplishments was securing hospital insurance in two migrant labor camps. The Council also helped establish a home for the aging, mobile X-ray unit, school dental clinics, an approved nursing home, and assistance for the physically handicapped and the mentally retarded youth of the two counties. Classes on weight control were set up. Mental hygiene and child guidance clinics were established.

About 2 years after the Health Council began, Mrs. Catherine Revell took over as home economics agent in Northampton County, and Dr. Belle Fears became the new Public Health Director. They continued with the Health Council work.

As the council accomplished its many health purposes, it gradually became inactive. Individual former council members and others, however, have carried over into other fields the successful cooperation initiated by the Health Council. The resident

population does not change rapidly, and most of the original members of the Health Council have continued their leadership in the community.

Home Demonstration Clubs have the ability to inspire cooperative effort on the part of the people of a community. And each successful project leads to other types of cooperation. The cooperative endeavor which made the Health Council possible has had influences reaching far beyond the field of health. Cooperation among agencies was strengthened and this is helping the Eastern Shore make progress in many directions. The Health Council's efforts on family and community living, for example, made it easy to initiate the Expanded Nutrition Education Program. Twelve Extension Technicians were employed and trained and are now helping families with nutrition and related problems.

Many of the community-wide health programs are continuing by their own efforts. The agents keep in touch with them, but the transition to citizen leadership has freed them to spend more time on other phases of Extension work. □

## Safety fair — a surprising success

by  
William Beasley  
Information Specialist  
Montana Extension Service

Charles Egan, Extension agent in Stillwater County, Montana, had some negative thoughts when the idea for a Safety Fair was born at a USDA Defense Board meeting. He realized that many people consider safety like taxes—something to think about only when it can't be ignored any longer.

The county agent went ahead, expecting to have trouble getting exhibits and feeling sure that the people who came would quickly "go on about their business." Egan was partly right.

At first, people were not very enthused about taking part. There appeared to be little more interest among government agencies on any level. But as time went on, "individuals and organizations became more and more interested and brought up more and more ideas for possible displays," Egan said.

Initial planning was based on the idea that State, Federal, and local safety programs often fall far short of their goals because they fail to involve people in finding out how they best can help themselves avoid disaster or cope with it. So a number

of people were urged to help from the start.

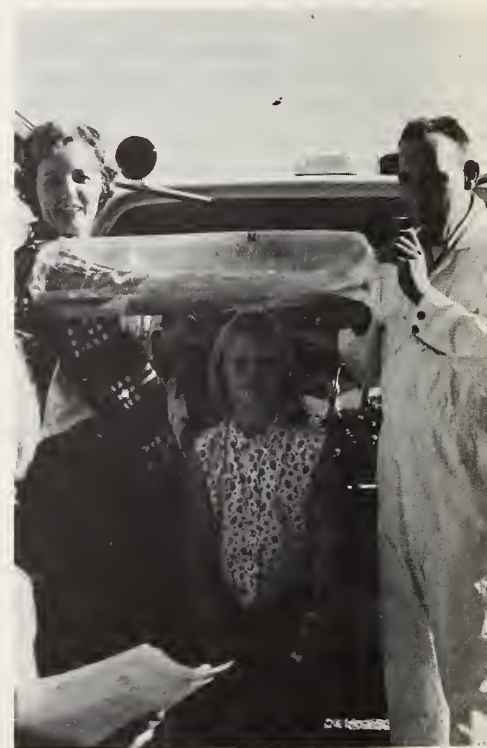
This worked. More people, more agencies, and more ideas got involved. Soon local search and rescue organizations, ambulance services, first aid classes, fire departments, sheriff's posse, youth groups, and individuals got interested and busy. Interest soon reached a county, district, and State level.

The American Red Cross, departments of the Montana Civil Defense organization and Cooperative Extension Service, rehabilitation centers, artificial limb supplier, and private companies asked for the opportunity to show what they had to offer.

The Columbus school board pledged full cooperation. The Safety Fair was held during district teacher conferences, so eight classrooms, the entire Future Farmers of America department, and the gymnasium were turned over to the Safety Fair. The high school Honor Society had members on hand to serve coffee at a Red Cross booth and to serve as guides.

The FFA chapter was under a handicap, with their adviser gone to

*Among the first aid equipment exhibited at the safety fair was this plastic air splint.*





the teachers' meeting. How well the boys did anyway was evident months later when the chapter won the National FFA Foundation's State farm safety award.

They set up a "farm and shop" safety demonstration which included proper use of power shop equipment. Members showed how to use a tool bar mounted on a tractor. People were kept away from the unsafe ladder, unguarded machinery, and other "bad examples," but were encouraged to try the safe method with safe equipment.

This "audience participation" idea, used wherever possible, was one reason that many people who obviously expected to attend only a few minutes might be there for 2 or 3 hours. And as the word spread, far more people came than had been expected.

There were things to do, to see, to learn, to taste, touch, hear, and benefit from immediately. The community hospital set up a new electric bed unit and an electronic device able to measure heart operation "while you wait." Few passed up a chance to take a look at their heartbeat.

Blood type tests of most visitors will form the nucleus of a county blood type record, which eventually could save time and lives.

The learning process had been going on some time before the actual fair. Every grade school in the county entered a poster contest offering trophies in the fields of home, water, fire, hunter, and school safety.

More than 100 posters were entered, which meant an impressive display and a lot of people coming to see who won.

The local fire department brought in an urban fire prevention bureau team to provide the latest information, show new equipment, and demonstrate ways to eliminate or cope with fire hazards. Their presentation included explosions of various magnitude, started with different fire sources, as well as a demonstration of how to put out actual fires. People left remembering why not to use carbon tetrachloride extinguishers, never to store gasoline in anything except metal containers, and that all fires are not alike.

A chance to taste wafers and "can-

dies" stocked in Civil Defense shelters stopped people long enough to see at least part of a film, look over a display, or ask a question about some phase of disaster protection.

The ability of continuous films on highway safety to hold an audience was in direct proportion to their shock power. Most told effectively a dramatic but factual story of needless accidents.

The one-performance highlight of the Safety Fair was a program on the North American Air Defense Command (NORAD) disaster warning system, presented by Mountain States Telephone Company.

After an explanatory film was shown, a call was completed to the national warning headquarters in Colorado Springs. The audience could hear both the interrogator and the commanding officer. He explained how the system works, commented on its importance, and then answered questions for 20 minutes.

This program, along with Civil Defense displays from Montana State University and the State Civil Defense organization in Helena, brought a sense of reality to the threat of nuclear disaster. The State organization displayed a portable hospital setup. Visual aids told how it can be set up and used in event of natural or nuclear disaster.

Egan is planning another fair this October. Groups who participated last year have promised to do more, or to come back with something new. Additional groups are asking for a chance to get into the act. Egan knows it won't be tough to increase the attendance, which was more than 1,000 last year.

So it appears that his big job will be finding space for everything and everyone. The county agent admits that he—and others with negative ideas—were wrong.

"I found out that it's a fair bet—a safe bet—that if you tell anyone interested in safety what you hope to do, he will be ready to help do it," Egan said. □

*A member of the local fire department urges fairgoers to prevent fires, and tells them the proper extinguisher to use in case a fire does start.*



# Teaching the use of soil surveys

by

W. D. Rogan  
County Extension Chairman  
Waukesha County, Wisconsin

Conducting a soil survey is an important job. Getting people to understand it and use the results is equally important.

When the Southeastern Wisconsin Regional Planning Commission undertook a detailed operational soil survey, a major part of the project was an Extension demonstration to help citizens see the survey's value.

The commission consists of three members from each of the seven counties in southeastern Wisconsin. It has carried out 11 other major planning programs in addition to the soil survey. The Wisconsin Extension Service has been responsible for much of the educational phase of the Commission's programs.

In the early stages of the development of the soil survey, Extension agents felt that this could be an important educational program in land use planning. As a result, an educational project was developed for the whole southeastern Wisconsin area to emphasize the importance of using soil survey information.

The intent of this project is to provide the public with many different learning experiences to help them see why the soil is an important factor to consider in planning for the future land uses.

*As part of Extension's educational program on soil surveys, a group of local Realtors observe a soil pit and study the role of soils in planning.*

The detailed maps resulting from the soil survey project show the locations of more than 300 different kinds of soils in the region. Information on their limitations is available in interpretive tables or from discussions with conservationists and scientists.

As an aid to understanding, the Waukesha County Soil Demonstration Farm Project was developed. The information from the detailed soil map was used to plan alternative uses of land on this farm—involving agriculture, housing, industrial development, and recreation.

The soil map was used to develop a farm conservation plan. We identified sloping soils and selected appropriate erosion control practices. The soil map shows location of wet soils. Interpretive tables show suitable drainage systems for agriculture and facts about their installations.

Two large plan maps show how residences can best be fitted to the farm land. One is based on installation of private wells and septic tanks. The other is based on installation of public sewer and water supplies.

The maps identify wet subsoils where basements must be equipped with sump pumps. They also show where septic tanks and seepage fields are a poor risk because of wet soils, flooding, slow permeability, or shallow bedrock.

Other large plan maps of the farm show how the land could be used as an industrial park and as a recreation area. The recreation plan is fitted to the land on the basis of both soils and topography. A zoning district map fits the soil and topography and integrates land uses with those already existing around the farm.

The Waukesha County Extension Service led in the development of the project, but several agencies cooperated. Waukesha County institutions made the land available. The Soil Conservation Service made and interpreted the detailed soil survey. The Southeastern Wisconsin Regional Planning Commission and the Waukesha County Park and Planning Commission developed many of the land use plans. The University provided technical and advisory assistance.

An interagency memorandum of understanding has been developed between the U.S. Department of Agriculture, Soil Conservation Service, Extension, Southwestern Wisconsin Regional Planning Commission, and the seven county soil and water conservation districts, to help achieve the full value of the survey. This agreement gives Extension continued educational responsibilities—the demonstration farm, it seems, is only the beginning. □





by  
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## 'Feeder-finance' 4-H projects

During the last decade, more than 100 Marshall-Putnam County 4-H'ers have learned the principles of money management and feeding for a profit in their feeder-finance livestock projects.

For many years, not all 4-H'ers had an equal chance at the winner's circle. The \$25 calf was poor competition in the show ring against a \$200 calf purchased by a large breeder. And not all 4-H'ers could even afford a \$25 calf.

In 1959, Assistant Farm Adviser Jon Ellis and his county committee laid the blueprint for a feeder-finance beef project. It called for members to:

- Borrow money from a registered lending institution at the current interest rate to finance the purchase of the calves,

- Show from one to five calves at fair time,

- Feed the calves however they chose.

It also called for the county 4-H committee to:

- Obtain all calves from one place,

- Offer the calves to members at the same current market price,

- Distribute calves to project members by drawing numbers out of a hat,

- Determine the champion animal of the feeder-finance project by giving equal consideration to rate of gain and live placing.

An important aspect of the program is the opportunity for the youngsters to learn, not only the mechanics of



*The feeder-finance calves are vaccinated and tattooed before 4-H'ers take possession.*

a loan transaction, but the reasons for borrowing money and how to handle credit. Each 4-H'er enrolled in the project goes personally to the bank or other lending institution to apply for his loan.

Results of the project's initial years have been encouraging. On more than one occasion, the champion feeder-finance calf has been grand champion steer of the county 4-H show.

In October 1967, 20 county 4-H'ers purchased 35 calves weighing from 400 to 460 pounds. By fair time in July 1968, the calves' weight ranged from 780 to 1,125 pounds—gains from 345 to 685 pounds during the 278-day feeding period.

Contest winner of the 30 calves shown last year placed first in rate of gain and fourth on foot. This year, 28 4-H'ers are feeding 45 calves for show.

Assistant Farm Adviser Bob Harris expanded the project in 1968 to include feeder pigs. Nineteen 4-H'ers enrolled the first year—each purchasing 10 pigs.

The feeder pig project was set up using the same requirements as the feeder-finance beef project—4-H'ers must borrow the money to finance the pig's purchase, and judging was split between rate of gain and live placing.

Each of 11 4-H'ers exhibited two of his 10 pigs at the Marshall-Putnam 4-H fair in July in a special feeder-finance class. The champion pair placed first on rate of gain and on foot. In 1969, the rules were changed so that each 4-H'er could borrow money to finance 5, 10, 15, or 20 pigs. This year, 16 4-H'ers have 225 pigs on feed.

Two county farmers, Francis Boyle and Wilbur Doyle, who are on the 4-H council and who have had children in the dual-county 4-H program, feel that the feeder-finance projects aid the county 4-H'ers in developing a realistic approach to livestock production. Not every 4-H'er has made a profit every year, but thus far all loans have been repaid without difficulty. As a whole, the feeder-finance project has been realistically profitable.

Inherently the project places more emphasis on feeding ability, wise use of borrowed money, and rate of gain than on animal quality in the show ring.

Most important, the project helps the leaders of tomorrow recognize the importance of credit in a business operation. □

# EMIS — as Iowa sees it

conducted a popularity poll concerning staff acceptance of EMIS, results of a study by a graduate student shed some light on it.

Assuming that some sort of reporting system is an administrative necessity for management and evaluation, he asked County Extension Directors which system (EMIS or the previous system) they would prefer. About 75 percent said EMIS, and 16 percent said "the previous system." Evidently, 9 percent didn't accept the assumption and said they preferred none.

EMIS, as the Iowa staff is learning to live with and profit from it, is more than a replacement for FES-21. It was derived from a concept of management as resource mobilization; staff motivation; and planning, organizing, and directing activity toward known goals.

That concept is put into operation as a system with three main inter-related parts:

- Planning,
- Reporting of activities as numerical data,
- Narrative reporting of substantial accomplishments.

From a director's viewpoint, it is not the perfect system. It doesn't tell him everything that he would like to know when he'd like to know it. Neither is it perfect from the standpoint of administrative management functions, program leadership, or specialist or generalist standpoints.

But it does have a lot going for it from all these standpoints—particularly in helping to define and in supporting the planning functions and in reporting staff member and group activity.

EMIS brings a positive pressure for improved planning. It helps the individual and the staff group achieve better planning. This alone, many of the Iowa staff believe, would justify the system.

Planning under EMIS can be frustrating, no question about that. It seems to frustrate most those who really dislike planning, those who have no deep appreciation for the value of planning, or those who—frankly—have limited skills in planning.

The EMIS approach to planning brings key elements together: *purposes* to be achieved; *clientele* to be the target of program efforts; *subject matter* relevant to the purpose and clientele; and—the vital element—*manpower* inputs necessary to achieve the purposes.

Each State—for that matter, each staff unit—uses its proven methodology, techniques, and procedures for involving committees and clientele to identify needs and develop program thrusts. EMIS gives a better way than we have had before to relate and interrelate the manpower commitments and the subject matter, purposes, and clientele. EMIS does not plan a pro-

Had Benjamin Franklin been a Cooperative Extension worker, that famous remark might have come down to us as: "... in this world nothing can be said to be certain, except death and taxes and some kind of reporting system!"

Most Extensionists today know that a new system is in use in pilot States, already adopted by numerous others, and being readied for still other States. It goes by many names, most based on the unique acronym EMIS—Extension Management Information System.

The Iowa staff is well into its second year with EMIS. We've all had opportunities to review the wealth of data that a computer can provide when inputs are available; we've also studied and used its potentialities for planning.

Although we in Extension have not



every reason to believe that we improve our skills in using the system as we gain experience and make modifications.

We have more and better information on our current program position and plans than was possible before EMIS came to Iowa!

For example, we know that in the first 6 months of this year our total staff reported over 850 days devoted to swine programs. These efforts emphasized production, diseases, nutrition, and outlook. We know the manpower input related to each purpose. We know that about one-third of these days were devoted to work direct with producers. The data conversely show how much time was devoted to work with those other than producers who relate directly to the industry.

The second major component is activity reporting. The time inputs of staff members are related to purposes, subjects, and clientele.

Activity reporting does not tell anything about changes that result in the clientele as a result of time inputs; it does not evaluate the teaching or organizing ability of the staff member.

EMIS does collect activity data for individuals that can be aggregated readily into successively larger blocks to yield time devoted to certain purposes, to certain subject matter, and to certain clientele. The efficiency of the computer makes it reasonable to retrieve and analyze individual and group activities from an almost infinite number of vantage points.

Activity reports generate an immense volume of data. The activity reporting phase of the information system deals almost entirely with time. We have been surprised at the amount of time reported against some State purposes and with some audiences. Naturally this raises the question, "Should we purposely set out to make major changes?" This is the kind of decision which data from EMIS activity reporting can support.

Plans for the swine program show that for the coming year we'll be

increasing efforts in this area by 10 percent. Because of the data mentioned above, we know we're increasing the effort. We know that these increases will be devoted to production, disease, nutrition, outlook, and records in that order. You might say EMIS helps us know where we're going.

One of the attractive aspects of EMIS, we believe, is the flexibility: within the broad guidelines of the system that will yield information essential nationally, each State can build the system that provides information to specifically fit its management needs.

The third major component of EMIS has nothing to do with the computer. Rather, its function is to highlight and record the qualitative accomplishments of the individual and staff group. It provides the opportunity for the staff member to tell his colleagues—and his administrative and program leaders—what results he's seeing.

The computer is a useful ally in narrative reporting, too. It can provide the time, subject matter, and clientele data that put a solid base of credibility under the qualitative, evaluative description of the human aspects of education.

Two decades ago the editor of a well-known national magazine made a speech under the title, "You don't edit a magazine by arithmetic."

State directors of Cooperative Extension, we think, would agree with a paraphrased version: You don't operate an Extension Service by arithmetic.

On the other hand, we are finding that the arithmetic of EMIS (and particularly the increasingly sensitive and precise planning and reporting that it encourages among staff) helps the administrator meet the challenges of his task. In Iowa we believe that the system more than repays the time and attention that individual staff members and staff groups invest in our Extension Management Information System! □

by

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gram, but it certainly helps describe what is being planned.

The data support rigorous analysis to set priority and balance of effort; the more specific and refined the plans, the greater the opportunity for decisions that effectively organize and direct resources.

The EMIS approach enters at the point where the staff develops plans. It brings in the capacity of the computer to sort, combine, separate, and report out data with ease. This ease and efficiency helps the planner concentrate on his tasks of judgment and decision, rather than on the clerical tasks.

The management information system provides a framework of purposes, subjects, and clientele. It is broad in scope and logical in organization; it is compatible with the organizational style of Extension work. Thus, in a State, data are additive from different units—geographic, staff group, etc. State adds to State to give national data.

The national code lists offer the highest level of generality that will provide a meaningful, useful aggregation of effort throughout the Nation. States can derive their State purposes, subjects, and clientele, relating to the national lists.

In our own State, this second time through the planning function under EMIS has been smoother and more meaningful than the first. There is



## A test of our will?

Use of non-professional aides supervised by professional home economists to provide personal educational services to help our Nation's unfortunates enjoy better nutrition is one of the exciting pieces of ingenuity to originate in Extension in recent years.

The concept has enjoyed tremendous success through both the test stages and the initial phases of going nationwide. For all practical purposes, Extension's goal of putting 5,000-plus aides in the field helping 200,000 low-income families by July 1, 1969, was right on target. The aides themselves have received national acclaim. Representative aides have described their work, their needs, and their successes, as well as the needs of the people they help, to officials of the Department of Agriculture and the Bureau of the Budget.

This concept is just the latest example, among many, of Extension's flair for ingenuity in getting the most for the least—giving the most service to the public for the least public cost. The service in this case deals with nutrition and involves helping low-income families expand their private resources, make increased use of other resources and services available to them, and get maximum satisfaction (nutrition) from the total package of resources they are able to obtain.

This success should not be viewed as an end. Rather it should be viewed as a springboard to the future.

The thing that has become most apparent in the movement to take the Expanded Nutrition Program nationwide is the extent to which the total need surpasses our ability to meet it with present resources and ingenuity. It is highly improbable that the legislators can or will provide sufficient resources to meet the total need with present ingenuity. It is equally improbable that Extension can develop sufficiently effective ingenuity that, coupled with present resources, will meet the total educational need to win this war on hunger and malnutrition.

At this point the key to meeting the total need to the maximum feasible extent appears to revolve around both additional inputs of resources and new flashes of the ingenuity for which Extension is known.

Surely bringing together the resources and developing the needed ingenuity to win this war on hunger and malnutrition is not too great a task. Rather it appears to be a test of our will.

After all, our Nation did put the first man on the moon.—WJW